4.3.100 Infrastructure Standards—Utilities

Subsections:

4.3.105	Sanitary Sewers
4.3.110	Stormwater Management
4.3.115	Water Quality Protection
4.3.117	Natural Resource Protection Areas
4.3.120	Utility Provider Coordination
4.3.125	Underground Placement of Utilities
4.3.127	Electrical Services
4.3.130	Water Service and Fire Protection
4.3.135	Major Electrical Power Transmission Lines
4.3.140	Public Easements
4.3.145	Wireless Telecommunications System (WTS) Facilities

4.3.105 Sanitary Sewer

- (A) All sanitary sewer design including supporting documentation must be prepared and stamped by an Oregon licensed Engineer.
- **(B)** Sanitary sewers must be installed to serve each new development within the city limits and to connect developments to existing sanitary sewer mains.
- **(C)** The sanitary sewer must be designed and constructed in conformance with Chapter 2 of the *Engineering Design Standards and Procedures Manual* (EDSPM).
- **(D)** The City Engineer must approve all sanitary sewer plans and proposed systems prior to development approval for an application proposing or requiring new sanitary sewer construction.
- **(E)** For proposed developments in unincorporated urbanizable land, the Lane County Sanitarian must approve all septic system designs.
- **(F)** The sanitary sewer system must be separated from any stormwater sewer system.

4.3.110 Stormwater Management

(A) Stormwater Management Improvements – General Standards

- (1) All stormwater management system design including supporting documentation must be prepared and stamped by an Oregon licensed Engineer.
- (2) A stormwater management system must be installed to serve each new development within the city limits.
- (3) The stormwater management system must be designed and constructed in conformance with 4.3.110(C) Stormwater Study Standards below.

- (4) The stormwater management system must be separated from any sanitary sewer system.
- (5) Any development that creates or replaces 5,000 square feet or more of impervious surface area and discharges to the storm system must install storm water controls that minimize the amount and rate of surface water runoff into the city stormwater system. The storm system must be constructed consistent with the *Engineering Design Standards and Procedures Manual* sections 4.03.1, 4.03.2, and 4.03.4.
- (6) Identification of Water Quality Limited Watercourses. The Director must maintain a Water Quality Limited Watercourses (WQLW) Map on file in the Development Services Department, which designates certain watercourses and their direct tributaries within the City and its urbanizing area. Any revision to the WQLW Map must be approved by the City Council as an amendment to this Code. Those watercourses and their direct tributaries included on the WQLW Map have been found to warrant protective measures in support of the City's response to State and federal regulations regarding surface and subsurface discharging stormwater management systems by satisfying the following standard:
 - (a) Water Quality Limited Watercourses (WQLW): Waters of the State that meet one or more of the following standards:
 - (i) Watercourse reaches, lying within the City and its urbanizing area, that are included by the State of Oregon Department of Environmental Quality (ODEQ) on its most recently adopted "303(d)" List of Impaired and Threatened Waterbodies.
 - (ii) Watercourse reaches, lying within the City and its urbanizing area, with significant water quality impairment identified by water quality monitoring and sampling done in accordance with approved quality assurance/quality control (QA/QC) protocols.
 - **(b)** A direct tributary to a WQLW that satisfies the following standards:
 - (i) Any watercourse that flows directly into a WQLW. However, watercourses that flow into the WQLW as a piped connection, where the pipe system extends more than 200 feet upstream of the connection point are not considered as flowing into a WQLW under this standard.
 - (ii) Any watercourse that is a diversion from a WQLW and that discharges into either a WQLW or other direct tributary to a WQLW and where the water quality of the diverted flow at the discharge point has been degraded when compared with the water quality at the diversion point.
- (7) Protection of Riparian Area Functions. A developer is required to employ site design, landscaping, and drainage management practices to protect, preserve, and restore

the riparian area functions of the reaches of those watercourses shown on the WQLW Map that are contained within or abut the lot/parcel upon which the proposed development is located. For the purposes of this Code, riparian area functions include, but are not limited to:

- (a) Maintaining temperature;
- **(b)** Maintaining channel stability;
- (c) Providing flood storage;
- (d) Providing groundwater recharge;
- (e) Removing sediments;
- **(f)** Reducing contaminants, for example: excess nutrients; oils and grease; metals; and fecal coliform;
- (g) Moderating stormwater flows; and
- (h) Providing fish and wildlife habitat.

(B) Stormwater Study Standards

(1) A complete Stormwater Study, as outlined below, must be submitted for all developments that generate public and/or private stormwater runoff from more than one acre of land or generate peak flows in excess of 0.5 cfs. Applications for development that creates 5,000 square feet of new impervious surface or modifies an existing stormwater management system with a capacity of 0.5 cfs or greater must also include a complete Stormwater Study.

All developments containing or adjacent to a floodplain, stream, wetland, natural resource area, or wellhead protection zone must include in the submitted Stormwater Study a review and report on the impact to those.

- (2) A Stormwater Study must include the following:
 - (a) A written narrative describing the proposed stormwater management system in detail, including connections to the public stormwater management system, a description addressing water quality measures (Best Management Practices) proposed, as well as any necessary capacity measures that may be required for development (i.e. a detention pond) as determined by the Stormwater Study.
 - **(b)** A hydrological study map, that contains:

- (i) The development site and adjacent areas that contribute in excess of 0.1 cfs from offsite flows, well defined, and an area beyond the development site of not less than 100 feet:
- (ii) Streets adjacent to or hydrologically connected to the development area, and street names;
- (iii) Flow arrows in streets and ditches;
- (iv) Contours or spot elevations for verification of direction of overland flow and pipe cover; Contour intervals on the study map must be as follows:

Slope	Contour Interval
(%)	(Feet)
0 - 10	2
11 - 25	5
> 25	10

- (v) Drainage areas of all sub-basins (in acres);
- (vi) Collection points (nodes) at downstream limits of all sub-basins;
- (vii) A profile of the stormwater management system showing invert elevations, maintenance access hole top and bottom elevations, existing utilities, and existing and finished ground line elevations;
- (viii) Existing and proposed stormwater pipes and channels with sizes and/or cross-sections included;
- (ix) Future pipes in the system, complete with proposed sizes, slopes, pipe cover, and flow line elevations at maintenance access holes;
- (x) North arrow, scale, Engineer's name and contact information, and date:
- (xi) Environmentally sensitive areas (e.g. gullies, ravines, swales, wetlands, steep slopes, springs, creeks, etc.) and direction of the flow of natural drainage features; and
- (xii) 100-year flood plain with flood elevations and 100-year flood way, as applicable.
- **(c)** Hydrologic calculations to establish runoff volumes and peak flows as provided in Section....

(d) Hydraulic calculations to establish pipe size, flow velocity, and hydraulic grade line.

(C) Stormwater Study Types

- (1) A Small Site Stormwater Study is required when all the following criteria are met:
 - (a) The proposed development is on a site that is less than five acres in size for a residential development, or is a commercial, industrial, or mixed-use development that is on a site that is one acre or less in size.
 - (b) The study area drains into an existing public stormwater management system with available capacity, as determined by testing performed by an Oregon licensed Engineer in conformance with the Eugene Stormwater Manual, for the peak flow based on the storm event frequency required underSDC 4.3.110(D).
 - (c) The study area does not contain or is not abutting to a floodplain, stream, wetland, natural resource area, or well head protection zone. Only locally significant resources that are on an adopted inventory or map, or resources that are adopted as part of the WQWL map are applicable under this standard.
- (2) A Mid-Level Site Stormwater Study is required when the criteria for a Small Site Stormwater Study cannot be met and when ALL of the following criteria are met:
 - (a) The development area, including any hydraulically connected area on the same property, is less than 25 acres in size.
 - **(b)** The development area, including any hydraulically connected area on the same property, drains to an established public system within the city limits.
 - (c) The development area, including any hydraulically connected area on the same property, does not contain or is not adjacent to a floodplain, stream, wetland, natural resource area, or well head protection zone.
- (3) A Full Site Stormwater Study is required when the criteria for a Small Site and Mid-Level Site Stormwater Study cannot be met and where any of the following conditions are met:
 - (a) The development area, including any hydraulically connected area on the same property, is greater than 25 acres in size.
 - (b) Developments that require creation of a new outfall and/or the stormwater from the new development will exceed the existing stormwater management system capacity.

- (c) The development area, including any hydraulically connected area on the same property, contains or is adjacent to a floodplain, stream, wetland, or natural resource area.
- (d) Any development that generates a peak flow in excess of 0.5 cfs, modifies an existing stormwater management system with a capacity of 0.5 cfs or greater, or is a redevelopment or new development that creates 5,000 square feet or more of new impervious area.
- **(D)** Stormwater Study Hydrologic Calculation Standards. The stormwater study required under SDC 4.3.110(C) must be supported by hydrologic calculations that conform to the following standards:
 - (1) A small site stormwater study must be supported by calculations using the rational peak flow method, Q=CiA, where 'Q' is the peak flow, 'C' is a runoff coefficient, 'i' is the rainfall intensity, and 'A' is the catchment area, as follows:
 - (a) When the runoff coefficient 'C' is 0.5 or greater, the peak flow for impervious surfaces must be calculated separately from the pervious surfaces and compared to the peak flow of the combined area. The higher of the two peak flow rates must be used as the peak flow rate for the purpose of the stormwater study.
 - **(b)** For the purposes of determining whether stormwater quality standards are met using the rational method, a rainfall intensity 'i' of 0.25 inch per hour must be used to calculate peak flow.
 - (c) For the purposes of determining stormwater capacity using the rational peak flow method, the rainfall intensity 'i' must be calculated using the Intensity Duration Frequency curves from the West Springfield Drainage Master Plan (1983) (available in Chapter 4 of the *Engineering Design Standards and Procedures Manual*). The storm event frequencies in SDC Table 4.3.1 must be used:

Table 4.3.1 Storm Event Frequencies			
Peak Flow	Storm Event Frequency		
Range			
<5 cfs	2-year storm event		
5 cfs to <20 cfs	5-year storm event		
20 cfs to <40 cfs	10-year storm event (1)		
40 cfs and	EQ year starm ayant		
above	50-year storm event		

(1) The 25-year storm event may be required when downstream capacity issues are identified during a Type 2 or Type 3 review process.

- (2) A mid-level site stormwater study and full site stormwater study must be supported by calculations using the unit hydrograph method.
 - (a) The Natural Resources Conservation Service (NRCS) SCS Type 1A distribution must be used (provided in the *Engineering Design Standards and Procedures Manual* for reference). The storm event frequencies in Table 4.3.1 must be used.
 - **(b)** For the purposes of determining whether stormwater quality standards for midlevel and full sites, a rainfall intensity of 0.83 inches per 24-hour period must be used.

A full site stormwater study must include floodplain analysis if the development will affect the floodplain. The 100-year flood event frequency must be used for development within the floodplain.

4.3.115 Water Quality Protection

These regulations apply water quality protection to only those sites that require Minimum Development Standards Review as specified in SDC 5.15.100, Site Plan Review approval as specified in SDC 5.17.100, and Land Divisions (Partition Tentative Plan and Subdivision Tentative Plan) approval as specified in SDC 5.12.100, or that disturb more than one acre of land through a Type 1 review. The following standards do not apply to single unit dwellings duplexes, or middle housing in the R-1 District that disturb less than one acre of land, unless as specified in SDC 4.3.115(A)(1). Existing buildings that are within the riparian areas specified in SDC 4.3.115(A)(1) and (2) are not considered non-conforming. SDC 4.3-115(A)(2)(a) and (b) provide additional protection from a non-conforming status.

- (A) When addressing criterion (E) as specified in SDC 5.12.125, for Land Divisions, and SDC 5.17.125 for Site Plan Review to protect riparian areas along watercourses shown on the Water Quality Limited Watercourses (WQLW) Map, the following riparian area boundaries must be utilized:
 - (1) Along all watercourses shown on the WQLW Map with average annual stream flow of 1,000 cubic feet per second (CFS) or greater, the riparian area boundary is 75 feet landward from the top of the bank. Existing native vegetative ground cover and trees must be preserved, conserved, and maintained between the ordinary low water line and the top of bank and 75 feet landward from the top of bank.

Within the Willamette Greenway, any change or intensification of use to a single unit dwelling or Middle Housing requires Site Plan Review as specified in SDC 3.3.315. through the Site Plan Review process the Director may reduce the size of the required riparian area if there is a finding that the proposed development is in

- compliance with SDC 3.3.300, the Willamette Greenway Overlay District, SDC 3.2.280 and other applicable provisions of this Code.
- (2) Along all watercourses shown on the WQLW Map with average annual stream flow less than 1,000 CFS the riparian area boundary is 50 feet landward from the top of the bank. Existing native vegetative ground cover and trees must be preserved, conserved, and maintained both between the ordinary low water line and the top of bank and 50 feet landward from the top of bank.
 - (a) For all watercourses subject to Subsection 4.3.115(A)(2), other than the Mill Race or Cedar Creek, the 50-foot riparian area standard may be reduced to 35 feet, provided an equivalent amount and function of pervious land is established elsewhere on the property that utilizes water quality measures including, but not limited to: wetlands; bioswales; and additional trees, especially in parking areas, exclusive of otherwise required water quality measures and landscape areas. The applicant has the burden of proof to demonstrate, to the satisfaction of the Director, equivalency in relation to both the amount of pervious land (as specified above) and riparian area function (as specified in SDC 4.3.110(G)).
 - (b) An existing building within a riparian area is not considered a non-conforming use if destroyed by earthquake, flood or other natural disaster, or fire. In this case, the replacement building may be constructed within the same footprint as the existing building. If the building is within the Willamette Greenway, the standards in SDC 3.3.300, Willamette Greenway Overlay District apply.
- (3) Where a watercourse divides a lot/parcel and the existing riparian area along that watercourse is degraded in riparian function, the applicant may relocate the watercourse to another portion of the property as approved by the Director and applicable State or Federal agency.
- **(B)** Permitted Uses in Riparian Areas. The following uses are permitted in riparian areas as long as they do not diminish riparian functions:
 - (1) The planting of trees and native vegetation to promote bank stability, enhance riparian areas, minimize erosion, preserve water quality and protect federally listed species. Trees may be clustered to allow the preservation of views; or to allow maintenance vehicles to approach City maintained stormwater facilities including detention basins, outfalls, culverts and similar stormwater facilities as may be permitted by the *Engineering Design Standards and Procedures Manual*.
 - (2) The felling of hazardous trees for safety reasons as specified in SDC 5.19.100, Tree Felling.
 - (3) Riparian area restoration and enhancement including the removal of invasive plant species, where necessary.

- **(4)** Flood control structures, where necessary.
- (5) Stormwater management systems and outfalls, as specified in the *Engineering Design Standards and Procedures Manual* or as required by other regulating authorities.
- (6) Multi-use paths for pedestrian and/or bicycle use must be permitted, provided that the multi-use path drains away from the watercourse. Multi-use paths must be located along the outer edge of the required riparian area and away from the watercourse. The multi-use path must be located at the outermost edge of the 75foot-wide Riparian Setback to the maximum extent practicable. Utilities may be extended within a multi-use path.
- (7) Water-dependent or water-related uses between the Willamette River and the Greenway Setback Line as may be permitted in the Willamette Greenway Overlay District.
- (8) Private driveways, public street crossings, bridges, and necessary culverts when there is no other vehicle access to the property. Crossings must be preferably at right angles to the watercourse. Public and private utilities must be permitted within the driveway, public street, or bridge right-of-way.
- (9) Repair, replacement, or improvement of utility facilities as long as the riparian area is restored to its original condition.
- (10) Routine repair and maintenance of existing structures, streets, driveways, utilities, accessory uses and other similar facilities.
- (11) Other activities similar to those listed above that do not diminish riparian function. The Director must make the interpretations as specified in SDC 5.11.100.
- (C) For protection of water quality and protection of riparian area functions as specified in SDC 4.3.110, the following standards apply:
 - (1) Avoid development or redevelopment in the following circumstances:
 - (a) Unsuitable areas, including, but not limited to, unstable slopes, wetlands and riparian areas;
 - **(b)** Stream Crossings. Where crossings have to be provided, the impacts on water quality must be minimized to the maximum extent practical; and
 - (c) Hardening or armoring of stream banks and shorelines.
 - (2) Prevent:

- (a) Stormwater discharge impacts to water quality and quantity; and
- **(b)** Erosion and sediment run-off during and after construction.
- (3) Protect:
 - (a) Riparian areas, buffers, and functions around all watercourses; and
 - **(b)** Wetlands, wetland buffers and wetland functions.
- (4) Preserve the hydrologic capacity of any watercourses.
- (5) Utilize Native Vegetation in Riparian Areas. The required riparian area landscaping must be installed as part of the building permit process and may be bonded as specified in SDC 5.17.150.
- (6) Restore and enhance riparian areas that are degraded in riparian function.
- (7) In applying SDC 4.3.115(C)(1) through (6), riparian area protection, preservation, restoration, and enhancement measures must be applied as follows:
 - (a) For new development and redevelopment, existing riparian area functions must be protected and preserved. Degraded functions must be restored or enhanced through the full riparian area width, as specified in SDC 4.3.115(A)(1) and (2), and extending through the full frontage of the lot/parcel along the watercourse on the Water Quality Limited Watercourse (WQLW) Map.
 - (b) For additions and expansions on any portion of a lot/parcel, existing riparian area functions must be protected and preserved through the full riparian area width specified in SDC 4.3.115(A)(1) and (2), and extending through the full frontage of the lot/parcel along the watercourse on the WQLW Map.
 - (c) For additions and expansions within 100 feet of a watercourse on the WQLW Map on a lot/parcel that has degraded riparian functions, the area for restoration or enhancement must be based upon the ratio of the impervious area of the addition or expansion to the existing building or impervious area on the lot/parcel. The restoration or enhancement must start at the top of bank of the watercourse and work landward.

4.3.117 Natural Resource Protection Areas

- (A) The purpose of this Subsection is to protect identified natural resources in order to:
 - (1) Implement the goals and policies of the Metro Plan;
 - (2) Satisfy the requirements of Statewide Planning Goal 5;

- (3) Safeguard the City's locally significant wetland and riparian areas, especially the hydrologic and ecologic functions these areas provide for the community;
- (4) Safeguard fish and wildlife habitat;
- (5) Safeguard water quality and natural hydrology, to control erosion and sedimentation, and to reduce the adverse effects of flooding;
- (6) Safeguard the amenity values and educational opportunities for City's wetlands and riparian areas for the community; and
- (7) Improve and promote coordination among Federal, State, and local agencies regarding development activities near wetlands and riparian areas.
- (B) This Subsection must apply to natural resource protection areas that include land within the wetland and/or the riparian resource boundary and the development setback area, specifically:
 - (1) Locally significant protected wetlands, listed in the Springfield Local Wetland Inventory and shown on the Local Wetland Inventory Map.
 - (a) The City must determine which wetlands are locally significant through application of the Oregon Freshwater Wetland Assessment Methodology to the Local Wetland Inventory.
 - (b) Inventoried wetlands which are not deemed to be locally significant must not be subject to the development setbacks and other protections described in this Subsection, but must continue to be protected under permitting authority of applicable Federal and State agencies.
 - (c) During the application review process, if a property is found to contain a wetland that has not been inventoried, the applicable Federal and State agencies must be notified. Based upon the Federal and State agency review, both the Springfield Local Wetland Inventory and the Local Wetland Inventory Map may require amendment.
 - (2) Locally significant protected riparian areas, listed in the Springfield Inventory of Natural Resource Sites and shown on the Natural Resources Inventory Map. The City has determined which riparian areas are significant in accordance with rules adopted by the Oregon Department of Land Conservation and Development (DLCD).
 - (3) The protections described in this Subsection do not apply to:
 - (a) Properties that received development approval or were submitted for processing before December 28, 2005.

- (b) Properties with approved wetland or riparian fill and mitigation plans, permits or other approved actions issued by the Oregon Department of State Lands (DSL) and or the US Army Corps of Engineers (COE) or other approving authority with jurisdiction over wetland and riparian resources.
- (c) Sites shown on the City's WQLW Map that are already protected with 50-foot or 75-foot development setbacks in accordance with SDC 4.3.115.
- (4) Inventory map corrections: The Director may correct the location of a wetland or riparian boundary shown on the Local Wetland Inventory Map and/or the Natural Resources Inventory Map when it has been demonstrated by a property owner or applicant that a mapping error has occurred and the error has been verified by DSL. Wetland delineations verified by DSL must be used to automatically update and replace the City's Local Wetland Inventory mapping. No variance application is required for map corrections where approved delineations are provided.
- (C) Development Setbacks for Locally Significant Wetland and Riparian Areas.
 - (1) Development setbacks are the primary element of the City's protection program for locally significant wetland and riparian areas. Development setbacks are determined as follows:
 - (a) Locally significant wetlands on the Springfield Local Wetland Inventory which are not shown on the WQLW Map must be protected by a 25-foot wide development setback.
 - **(b)** Locally significant riparian areas identified on the Springfield Inventory of Natural Resource Sites which are not shown on the WQLW Map must be protected by a 25-foot wide development setback.
 - (c) Where a locally significant wetlands or riparian area is only partially shown on the WQLW Map, that portion which is not protected by the City's Stormwater Quality Management Program must be protected by a 25-foot wide development setback.
 - (d) Development setbacks from locally significant wetland areas are measured from the delineated edge of the wetland as acknowledged by DSL.
 - **(e)** Development setbacks from locally significant riparian areas are measured from the "top of bank" as defined in Chapter 6.
 - (f) Where locally significant wetlands and riparian areas overlap, the development setback area is measured from the edge of the delineated wetland.
 - (2) The Springfield Local Inventory Map and the Springfield Inventory of Natural Resource Sites Map must be used to provide a visual reference for locating known wetland and riparian areas, but must not be relied upon as the final authority for

locating the actual boundaries of these areas. The final authority is a delineation required as specified in SDC 5.12.120(B) and/or 5.17.120(B) in order to locate the boundaries of the resource for the purpose of applying development setbacks or other protections described in this Section.

(D) Site Plan Review as specified in SDC 5.17.100 is required for development in commercial, industrial, R-2, and R-3 land use districts where the multiple unit housing development is proposed within 150-feet of a locally significant wetland or riparian area.

Site Plan Review is not required for:

- (1) Single unit detached dwellings and middle housing in the R-1 land use district. However, the natural resource protection standards of this Subsection apply to these single-unit detached dwellings and middle housing; and/or
- (2) Land divisions that comply with water quality protection standards specified in SDC 4.3.115.
- **(E)** Permitted Uses Within Locally Significant Wetland and Riparian Natural Resource Protection Areas.
 - (1) The following uses and activities are permitted within a locally significant wetland or riparian natural resource protection area, including the development setback area, with no additional State or Federal permits:
 - (a) Any use, building or structure that lawfully existed as of December 28, 2005 is allowed to continue and required maintenance may occur.
 - **(b)** The maintenance and alteration of pre-existing ornamental landscaping must be permitted as long as no additional native vegetation is disturbed.
 - (c) These uses permitted in Subsections (a) and (b), above are not affected by any change in ownership of property.
 - (2) The following uses and activities are permitted within a locally significant wetland or riparian natural resource protection area, including the development setback area, provided that any applicable Federal, State, or local permits are secured:
 - (a) Wetland and or riparian restoration and rehabilitation activities.
 - **(b)** Restoration and enhancement of native vegetation, including the addition of canopy trees.
 - **(c)** Cutting and removal of trees that pose a hazard to life or property due to threat of falling.
 - **(d)** Perimeter mowing and other cutting necessary for hazard prevention.

- **(e)** Removal of non-native vegetation, if replaced with native plant species at a density that prevents soil erosion and encourages the future dominance of the native vegetation.
- (f) Normal farm practices such as grazing, plowing, planting, cultivating, and harvesting that meet the following standard and limitations:
 - (i) The farm practices were in existence or occurring on the property as of December 28, 2005;
 - (ii) The farm practices are of no greater scope or intensity than the operations that were in existence as of the December 28, 2005; and
 - (iii) Normal farm practices do not include new or expanded structures, streets, or other facilities involving placement of fill material, excavation, or new drainage measures.
- (g) Maintenance of existing drainage ways, ditches, or other structures to maintain flows at original design capacity and mitigate upstream flooding, provided that management practices avoid sedimentation and impact to native vegetation and any spoils are be placed in uplands.
- (h) Waterway restoration and rehabilitation activities such as channel widening, realignment to add meanders, bank grading, terracing, reconstruction of street crossings, or water flow improvements.
- (i) Maintenance and expansion of existing public drinking water facilities and the establishment of new public drinking water facilities. This includes essential and ancillary infrastructure and services needed for the operation of these drinking water facilities.
- (j) Replacement of a permanent, legal, non-conforming building or structure in existence as of December 28, 2005 with a building or structure on the same building footprint, if it does not disturb additional area, in accordance with the provisions of SDC 5.8.100, Non-Conforming Use. Access to and around the building footprint must be allowed as needed for the delivery of building materials and reconstruction, but this access must not cause unnecessary disturbance to vegetation within the resource protection area. Land within the resource protection area that is disturbed by reconstruction must be restored to its original condition.
- **(k)** Expansion of a permanent, legal, non-conforming building or structure in existence on December 28, 2005, if the expansion area is not within and does not disturb the locally significant wetland or riparian resource boundary, in accordance with the provisions of SDC 5.8.100, Non-Conforming Use.

- (I) Emergency stream bank stabilization to remedy immediate threats to life or property (Federal, State, or local emergency authorization may be needed for in-stream work).
- (m) Maintenance and repair of existing streets, including repaving and repair of existing bridges, and culverts, provided that these practices avoid sedimentation and other discharges into the locally significant wetland or riparian resource boundary.
- (n) Public multi-use paths, access ways, trails, boardwalks, picnic areas, or interpretive and educational displays and overlooks, including benches and outdoor furniture;
- (o) Construction of public and private transportation facilities, sewers, drainage ways, utilities, and other infrastructure which cannot be feasibly located outside of the locally significant wetland or riparian resource boundary, as determined by the Director. These facilities are subject to the development standards specified in Subsections (k) and (l), above.
- (p) New fencing may be permitted by the Director where the applicant demonstrates that the following standard can be satisfied:
 - (i) The fencing must not affect the hydrology of the natural resource protection area;
 - (ii) The fencing must not present an obstruction that would increase flood velocity or intensity;
 - (iii) Fish habitat must not be adversely affected by the fencing;
 - (iv) The fencing must be the minimum necessary to achieve the applicant's purpose; and
 - (v) Applications for new fencing within a locally significant wetland or riparian resource boundary must contain a scale drawing that clearly depicts the resource boundary and the development area setback, where applicable.
- **(F)** The following uses and activities must be permitted within the development setback area only, provided all required Federal, State, or local permits are secured:
 - (1) Docks, boat shelters, piers, boat ramps, and similar water dependent uses;
 - (2) Utilities including but not limited to water, wastewater, stormwater, electrical facilities, natural gas facilities, telecommunications, or other public improvements;

- (3) Streets or bridges where necessary for access or crossings;
- (4) Bioswales or similar water quality improvement projects;
- (5) Public multi-use paths, access ways, trails, picnic areas, or interpretive and educational displays and overlooks, including benches and outdoor furniture; and
- (6) Wetland and riparian restoration.
- (G) The following uses and activities must be prohibited within a locally significant wetland or riparian natural resource protection area, including the development setback area, unless permitted elsewhere in this Code:
 - (1) Placement of new structures or impervious surfaces;
 - (2) Excavation, drainage, grading, fill, or removal of vegetation except for fire protection purposes or removing hazard trees;
 - (3) Expansion of areas of landscaping with non-native species, such as a lawn or garden, into the protected areas;
 - (4) Disposal or temporary storage of refuse, yard debris, or other material;
 - (5) Discharge or direct runoff of untreated stormwater; and
 - **(6)** Uses not allowed in the list of permitted uses for the underlying zone.
- (H) Conservation and Maintenance of Locally Significant Wetland and Riparian Areas and Development Area Setbacks. When approving applications for Land Divisions, Site Plans, Master Plans, Discretionary Use Permits, Variances, and Land and Drainage Alteration Permits or for development permits for properties containing all or a portion of a wetland or riparian area, the City must assure long term conservation and maintenance of the wetland or riparian area through one or more of the following methods:
 - (1) The area must be protected in perpetuity by a conservation easement recorded on deeds and plats prescribing the conditions and restrictions specified in Subsections (E) through (G), above and any conditions imposed by State or Federal permits; or
 - (2) The area must be protected in perpetuity through ownership and maintenance by a private nonprofit association through a conservation easement or through conditions, covenants, or restrictions (CC&Rs), prescribing the conditions and restrictions specified in Subsections (E) through (G), above and any conditions imposed by State or Federal permits; or
 - (3) The area must be transferred by deed to a willing public agency or private conservation organization with a recorded conservation easement prescribing the

- conditions and restrictions specified in Subsections (E) through (G), above and any conditions imposed by State or Federal permits.
- (4) Other mechanisms for long-term protection and maintenance as deemed appropriate and acceptable by the Director. These mechanisms must be consistent with the purposes and requirements of this Section.
- (I) Notification and Coordination with State Agencies. The Director must notify DSL in writing of all applications to the City for development activities, including development applications, Building Permits, and other development proposals, that may affect any wetland or riparian areas identified in the Springfield Local Wetlands Inventory or the Springfield Inventory of Natural Resources Map. This applies to both locally significant and non-significant wetlands and riparian areas.
- (J) Development Setback Area Variances.
 - (1) Variance applications for development setback areas require compliance with either the Major Variance standards specified in SDC 5.21.130 or the Minor Variance standards specified in SDC 5.21.125; and
 - (2) In the case of loss of use of the property, the following additional standards apply:
 - (a) The application of the standards of this Section renders the property unbuildable:
 - (b) The applicant has exhausted all other options available under mapping errors specified in Subsection (B)(4), above and the development area setback variance specified in Subsection (3), below;
 - (c) There must be no significant adverse impacts on water quality, erosion, or slope stability, or these impacts have been mitigated to the greatest extent possible; and
 - **(d)** The loss of native vegetative cover must be minimized.
 - (3) In the case of varying the development setback area, such as averaging the setback area width, the applicant must submit a plan demonstrating compliance with the additional standard:
 - (a) There must be equal or better protection of the wetland or riparian area to be ensured through restoration, enhancement, or similar means;
 - (b) In the case of setback averaging, the required plan must show the proposed average setback width with measurements made at no greater than 50-foot intervals over the distance the property involved in the setback averaging; and

- (c) In no case can the activities prohibited in Subsections (G)(1) through (G)(3), above occupy the locally significant riparian area or wetland or more than 50 percent of the development setback area.
- **(K)** Transportation Facilities and Structures Development Standards. The following standards apply to transportation facilities and structures within wetland protection areas, including streets and driveways, bridges, bridge crossing support structures, culverts, and pedestrian and bike paths:
 - (1) Wetland and riparian protection areas can be crossed only where there are no practicable alternatives to avoid the resource;
 - (2) Transportation facilities and structures crossing wetland and riparian protection areas must be no wider than necessary to serve their intended purposes; and
 - (3) Within buffer areas, new streets, driveways, and pedestrian and bike paths must be located or constructed so as not to alter the hydrology of the adjacent wetland or riparian corridor.
- (L) Utility Development Standards. The following standards apply to permitted crossing, trenching, or boring for the purpose of developing a corridor for communication, energy, or other utility lines within or crossing properties within wetland or riparian protection areas:
 - (1) Utility maintenance access roads in or crossing protected resources must meet applicable standards for transportation facilities and structures in protected resources as specified in Subsection (K), above; and
 - (2) For underground utilities, the following additional standards apply:
 - (a) Boring under the waterway, directional drilling, or aerial crossing is preferable to trenching. If trenching is the only alternative, it must be conducted in a dry or dewatered area with stream flow diverted around the construction area to prevent turbidity;
 - **(b)** Common trenches, to the extent allowed by the Building Code, must be required in order to minimize disturbance of the protected resource;
 - (c) Materials removed or excavated during trenching, boring, or drilling must be deposited away from the protected resource, and either returned to the trench as back-fill, or if other material is to be used as back-fill in the trench, excess materials must be immediately removed from the protected resource and its associated buffer. Side-casting of removed material into a protected resource must not be permitted;
 - (d) Backfilling of trenches must utilize excavated soils from the site whenever possible. If other materials are used for backfill, they must not be of a pervious

- nature that would cause the trench to become a conduit for runoff or change the original hydrology of the protected wetland or riparian site;
- **(e)** The ground elevation of a protected resource must not be altered as a result of utility trench construction or maintenance. The finished elevation must be the same as starting elevation; and
- (f) Topsoil and sod must be conserved during trench construction or maintenance, and replaced on top of the trench.
- (3) Hydraulic impacts on protected resources and removal of native vegetation must be minimized; and
- (4) Where feasible, crossings of wetland and riparian protection areas must be perpendicular to the protected area to minimize the impact.
- **(M)** Vegetation Management Standards. The following standards apply to vegetation in wetland and riparian protection areas:
 - (1) Vegetation removal, pruning, or mowing in a locally significant wetland or riparian boundary must be the minimum necessary and in no case substantially impair any resource functions and values. Vegetation removal, pruning, or mowing in the development area setback must be the minimum necessary. Removal, pruning, or mowing of vegetation is allowed if the applicant demonstrates one of the following:
 - (a) The action is necessary for the placement of a structure or other allowed use for which a Building Permit has been issued;
 - **(b)** The action is necessary for maintenance of an existing structure or transportation facility;
 - **(c)** The action is necessary for correction or prevention of a hazardous situation;
 - **(d)** The action is necessary for completion of a land survey;
 - **(e)** The action involves the maintenance of a landscaped area that existed prior to December 28, 2005;
 - (f) The action is part of an approved restoration, enhancement, mitigation, or erosion control plan, including, but not limited to, invasive or noxious species removal and replacement with native species, and wetland area restoration, mitigation, or enhancement; or
 - **(g)** The action is part of a landscape plan approved by the City, and any other appropriate agencies, in conjunction with a Building Permit that minimizes adverse impacts on protected resources.

- (2) Planting is permitted in accordance with the following standards:
 - (a) The planting is part of an approved restoration, enhancement, mitigation, or erosion control plan;
 - **(b)** The planting is part of a landscape plan using appropriate native plant species, and the plan is approved by the City in conjunction with approval of a Building Permit: or
 - (c) The planting is to replace dead or damaged plants that were either part of a maintained landscape or part of the existing native plant community.

4.3.120 Utility Provider Coordination

- (A) All utility providers are responsible for coordinating utility installations with the City and the developer through the Development Review Committee or by separate written correspondence.
- **(B)** The developer is responsible for the design, installation and cost of utility lines and facilities to the satisfaction of the utility provider.

4.3.125 Underground Placement of Utilities

Whenever possible, all utility structures, facilities and equipment must be placed underground. However, overhead, and above ground structures, facilities and equipment are permitted for the following:

- (A) Emergency and temporary installations undertaken by utility providers for a maximum of 30 days.
- **(B)** Electrical transmission lines and backbone distribution feeders that are consistent with the Metro Plan's Public Facilities and Services Plan. These lines act as a main source of supply to primary laterals and direct connected distribution transformers and primary loads.
- **(C)** Appurtenances and associated equipment, including, but not limited to: surface-mounted transformers, pedestal-mounted terminal boxes, meter cabinets, telephone cable closures, connection boxes.
- **(D)** Structures without overhead wires, used exclusively for fire alarm boxes, streetlights, or municipal equipment installed with the approval of the City Engineer.
- (E) Power substations, pumping plants, and similar facilities necessary for transmission or distribution of utility services are permitted subject to compliance with zoning district regulations and the Metro Plan's Public Facilities and Services Plan. Required landscaping

and screening must be approved by the Director under Type 2 procedures for all these facilities prior to any construction being started.

- (F) Public television transmitters and receivers.
- **(G)** Industrial developments requiring exceptionally large power supplies may request direct overhead power during the Site Plan Review process, without a Variance.
- **(H)** Existing non-backbone distribution feeders located on existing streets on developed or undeveloped land.

4.3.127 Electrical Service

- (A) Electrical utility facilities are available to serve the site at the time of development.
- **(B)** Electrical utility facilities have capacity to serve the proposed development.

4.3.130 Water Service and Fire Protection

- (A) Each development area must be provided with a water system having sufficiently sized mains and lesser lines to furnish an adequate water supply to the development with sufficient access for maintenance.
- **(B)** Fire hydrants and mains must be installed by the developer as required by the Fire Marshal and the utility provider.

4.3.135 Major Electrical Power Transmission Lines

- (A) When necessary to increase the capacity of major electrical power transmission lines, utility providers must provide the increase by use of existing rights-of-way or easements.
 - (1) In the event that a utility provider determines that it cannot provide the increase by use of existing rights-of-way or easements, siting of major electrical power transmission lines is permitted as specified in the Metro Plan's Public Facilities and Services Plan.
 - (2) Notwithstanding Subsections (A) and (A)(1) above, a utility provider may locate major electrical transmission lines along routes identified on Auxiliary Map Number I dated 1982 of the Metropolitan Area General Plan.
- **(B)** Applications for siting of new major electrical power transmission lines are exempt from the provisions of SDC 5.4.105(B)(2).

4.3.140 Public Easements

(A) Utility Easements. The applicant must make arrangements with the City and each utility provider for the dedication of utility easements necessary to fully service the development

or land beyond the development area, as necessary. Public utility easements must be shown on plat or in a form approved by the City Attorney, and must meet the following standards:

- (1) The minimum width for public utility easements adjacent to collector and arterial streets ten feet.
- (2) The minimum width for sewer easements is five feet on either side of sewer line for sewers less than 12 inches diameter and less than five feet of cover, and seven feet on either side of the sewer line for sewers greater than 12 inches diameter or with greater than five feet of cover.
- (3) The minimum width for all other public utility easements is seven feet.
- (4) Notwithstanding the above standards, the utility provider or the Director may require a larger easement for major water mains, major electric power transmission lines, stormwater management systems or in any other situation to allow maintenance vehicles to set up and perform the required maintenance or to accommodate multiple utility lines.
- (5) Where feasible, utility easements must be centered on a lot/parcel line.
- (B) Watercourse or Riparian Area Maintenance Easements. Where the Director has determined that a watercourse or riparian area will be part of the City's Stormwater Management System, a maintenance easement is required in order to maintain the functionality of these areas. For watercourses, the easement must be measured from either the top of the bank, ordinary high water mark or the delineated setback line. The easement must be a minimum of ten feet wide where no equipment is required for access or maintenance. The easement must be extended to a maximum of 25 feet wide to allow City maintenance vehicles to set up and perform the required maintenance.